

Monthly Drought Update October 7, 2014 San Luis Obispo County

Note: Information provided in this update varies by date.

CURRENT CONDITIONS

U.S. Drought Monitor Status:

The latest U.S. Drought Monitor report released September 25, 2014 indicates San Luis Obispo County remains at the **D4 – Exceptional Drought intensity rating.** Approximately 95% of the state is at a level D-2 Severe Drought or worse with more than 58% of the state in a D4 – Exceptional Drought rating.

San Luis Obispo County Precipitation Totals (in inches):

Community	Precipitation Total Received from Last Update (8/26/14 – 9/22/14)	Precipitation Water Year (7/1/14 to present)	Avg. Annual Rainfall
Nipomo South (730)	0.00	0.00	16.00
Lopez Dam (737)	0.00	0.00	21.00
SLO Reservoir (749)	0.00	0.00	25.00
Los Osos Landfill (727)	0.00	0.00	20.00
Cambria (717)	0.00	0.00	22.00
Rocky Butte (703)	0.00	0.00	39.00
Santa Margarita (723)	0.00	0.00	26.00
Salinas Dam (719)	0.00	0.00	23.00
Atascadero (711)	0.00	0.00	18.00
Templeton (762)	0.00	0.00	14.70
Paso Robles (city)	0.00	0.00	14.33
Hog Canyon (709)	0.00	0.00	16.00

Source: www.slocountywater.org County of San Luis Obispo-City of Paso Robles Website

Near-term Outlook for Precipitation:

An early season cold front is expected to bring rain to Northern California in the last week of September. This cold front should pass through San Luis Obispo County later bringing an increase in the marine layer and producing pockets of mist and drizzle, although significant rain is not likely. Post frontal winds are expected to be strong which could increase the fire danger. Unlike many areas of the State, lightning has continued to be nearly absent this year in this County which has reduced the number of potential fire ignitions. The transition into fall will also bring an end to the normal monsoon season in the southwest which brought some rain to portions of California.

Reservoir Levels (% of capacity):

Note: Historical averages calculated using data from the following time frame:

Nacimiento: 1959 - 2013; Lopez: 1994-2013; Salinas: 1987-2013; and Whale Rock: 1985-2013.

Reservoir	% of Capacity	Current Acre Feet Storage
Nacimiento	17%	64,750
Lopez	45%	22,421
Salinas	24%	5,759
Whale Rock	48%	18,754

Source: www.slocountywater.org County of San Luis Obispo

STATE WATER

Status: The Department of Water Resources (DWR) continues to deliver State Water "Carryover" water for 2014. A recent algae bloom caused taste and odor issues, which appears to have been resolved. San Luis Reservoir is currently at 21% capacity.

Actions: The Public Works Department has released a 2015 projected delivery schedule and met in September with all sub-contractors to discuss the 2015 water delivery year in a worst case scenario.

VULNERABLE WATER SYSTEMS

There are no new updates regarding vulnerable water systems throughout the county since the September 9, 2014 report.

County Service Areas (CSA's):

Santa Margarita (CSA 23)

- Drought response level remains at ALERT status.
- Primary pumping is from shallow well No. 4. Deep well No. 3 is available for use if needed to supplement well No. 4.
- An emergency water supply project connecting Santa Margarita to Atascadero Mutual Water Company is being pursued through the Integrated Regional Water Management (IRWM) drought expedited implementation grant process. This project was approved in the suite of projects by the Board on June 17, 2014 and award announcement is anticipated in October.
- An emergency ordinance was adopted limiting outdoor watering. An informational mailer was sent to customers and signs in the community have been installed.

Shandon (CSA 16)

- Two wells currently provide all water to the Shandon community and continued to be monitored.
- An emergency ordinance was adopted limiting outdoor watering. An informational mailer was sent to customers and signs in the community have been installed.

Cayucos (CSA 10A)

- Supply is available from Whale Rock and one on site well. Staff has given a presentation to the Advisory Committee and business groups regarding conserving this supply.
- An emergency ordinance was adopted limiting outdoor watering. An informational mailer was sent to customers and signs in the community have been installed.

Avila Valley (CSA 12)

- Adequate supply is available from Lopez and State water "carryover" water sources for this year.
- An emergency ordinance was adopted limiting outdoor watering. An informational mailer was sent to customers and signs in the community are being installed.

Chorro Valley Institutions (CMC, Animal Services, Sheriff, County Operations, Camp San Luis, Cuesta College, County Office of Education):

- 2014 State water carryover water is available and being provided.
- An interconnection between the existing Nacimiento Water Project pipeline and the existing Salinas pipeline is being pursued through the State's drought emergency funds. The board approved this project on June 17, 2014 to be included in the IRWM drought grant application.
- The existing distribution system is being evaluated to assure water losses are minimized.
- Weekly conference calls are being conducted with all water users to plan for 2015 and 2016.

Non-County Operated:

- City of Morro Bay
 - Status: Emergency inter-tie with Chorro Valley and desalination permit.
- Cambria Community Services District
 - Status: Emergency San Simeon Creek Brackish Water Supply Project-Started Construction.
- San Simeon Community Services District
 - Status: Proposed recycled water project part of June 17, 2014 IRWM drought application.
- Heritage Ranch Community Services District
 - <u>Status:</u> The Nacimiento River is the only available water source for the community of Heritage Ranch. The emergency inter-tie agreement between the Flood Control District and the CSD was part of June 17, 2014 IRWM drought application.
- Rural Paso Robles residents

<u>Status:</u> Continue to identify water trucking options and outreach efforts. See County Drought Conditions and Water Conservation Website for drought relief update information.

IMPACTS

Agricultural Impacts:

University of California Cooperative Extension (UCCE) Agricultural Producer Survey

The UCCE agricultural producer survey continues to seek input about the effects of the drought on the local agricultural industry. The monthly survey is sent to producers, local agricultural organizations and UCCE Farm Advisors representing a wide variety of crops and livestock. Participation from producers remained strong, providing a good picture of on-the-ground conditions and impacts from the drought.

The information below is paraphrased from comments collected by the survey. Most respondents reported either no change in conditions or conditions have become worse in the last 30 days. However, rangeland conditions are worse, according to one respondent. This month's survey also asked producers what actions they would consider if drought conditions persist and what they estimate to be their timeframe for recovery from the impacts of the 2013/2014 drought.

Livestock producers report they continue to sell animals and many have applied for disaster assistance programs. Stock dams that are spring fed continue to dry up, decreasing the capability of keeping adequate water available for existing livestock. Even with average rainfall in 2015, producers report it will take more than three years to recover.

Vegetable growers report that if drought conditions persist they may idle ground or limit new plantings in 2015. In some portions of the county, producers are evaluating the need for additional irrigation to leach salts from root zones of several vegetable commodities. One vegetable producer reported 10-20% crop lost due to increases in root zone salinity. One grower reported recovery could be possible if 2015 is a good rainfall year.

Avocado growers continue to reduce leaf area as a method of reducing crop water needs by severe pruning. Severe pruning will also reduce water requirements for the next year as well. Even with average rainfall, avocado growers report it could take two to three seasons for pruned trees to recover to near normal production levels. One olive grower reported the need to eliminate winter cover crop plantings if drought conditions persist. Reductions in both the crop canopy and cover crops that can help protect against erosion from winter rains will increase erosion hazard and potentially reduce infiltration of precipitation into the soil. One olive grower reported it will take one production season with average rainfall to recover.

This year's earlier than usual grape harvest may result in the reduction of early fall irrigation needs. If drought conditions persist, some growers may reduce leaf area by severe pruning and it may take two to three years to recover to normal production levels.

U.S. Department of Agriculture Assistance Programs

To date, staff at the USDA Farm Service Agency (FSA) office in Templeton has received hundreds of applications for drought losses for 2013 and 2014 totaling over \$5 million in payments. Applications are still being accepted for the USDA Livestock Feed Program. Approval has been granted to the FSA to process the 2014 Non-insured Crop Disaster Assistance Program (NAP) applications. The Program will be available for producers that have paid insurance for grass losses for 2014. Programs for hauling water to livestock and a cost share program for emergency conservation measures for improvements to livestock water delivery systems such as springs, tanks, watering troughs and drilling new well sites are currently available.

For more information, contact the local FSA office at 805-434-0398 EXT 2.

State Water Efficiency and Enhancement Program

The California Department of Food and Agriculture (CDFA) is now accepting applications for the State Water Efficiency and Enhancement Program (SWEEP). The SWEEP program is intended to provide grants to agricultural operations to implement water conservation and energy saving measures on farms throughout the state. CDFA has established the program to increase water conservation by improving water management and efficiencies on farms while at the same time reducing emissions of greenhouse gases through energy efficiency. A range of water saving and energy saving technologies are eligible for

funding including conversion of irrigation systems, pump improvements and technology and management practices.

Incentives shall be ranked and distributed based on immediacy of water supply increased and efficiency gained to address water shortages, and reduction in water pumping or treatment that uses energy causing greenhouse gas emissions.

The application period for the SWEEP program is expected to open in late September, 2014 and there will be a short window to apply. A grower workshop on the funding will be held October 8, 2014, 1:00 to 3:00 at the UCCE Auditorium: 2156 Sierra Way in San Luis Obispo.

For more information go to http://www.cdfa.ca.gov/EnvironmentalStewardship/WEEP.html

Fire Danger:

Fire Danger

To date, CAL FIRE has responded to **4,750 fires** across the State since January 1, burning **86,784 acres**. This year's fire activity is well above the year-to-date average of 3,777 wildfires and 84,356 acres burned. These statistics do not include fires on Federal jurisdiction. In addition, due to statistical release dates, the information does not include the King Fire near Pollock Pines on Highway 50. Current fire information indicates the King Fire is currently 89,574 acres and 35% contained.

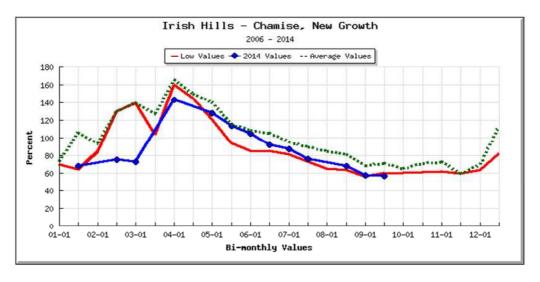
In San Luis Obispo County, from January through July, there have been **97** wildfires, which burned **89** acres. Since 2007, averages for this same period are 110 wildfires burning 438 acres. Statistics since July are not yet available.



Live Fuel Moisture (LFM)

(LFM is the moisture content of live vegetation expressed as a percentage of the oven-dry weight.)

The normal downward summer trend continues and in most areas, LFM is at or near historical lows and below critical levels (60%). Many deciduous shrub species such as black sage and poison oak received enough moisture this spring to undergo a growth cycle. The new foliage produced during this growth cycle is now dead and has significantly increased the amount of dead flashy fuel ready to burn. The high rates of tree mortality, particularly in non-native species, continue throughout the County with dead trees obvious in most areas.



Dead Fuel Moisture

(The moisture content of dead organic fuels is another important component of the relative fire danger. As with LFM above, dead fuel moisture levels are a good indicator of how likely fuels are to ignite and how intensely they will burn. 100-hr fuel refers to vegetation between 1 and 3 inches in diameter and 1000-hr fuel is 3-6 inches. When the fuel moisture content is low, fires start easily and will spread rapidly.)

September is typically the month when LFM reaches the lowest and most dangerous values for the year. Currently, due to recent hot weather, dead fuels are well below average and approaching historical lows.

Temperatures/Relative Humidity (RH)

Monsoonal influences and low pressure systems increased relative humidity and cloud cover and reduced temperatures during many periods this summer. High pressure the week of September 10 produced a week long heat wave in much of the southwest which helped spread several new fires in the State and prompted increased staffing patterns and red flag warnings. A record high temperature of 85° was set in San Luis Obispo County on September 14, 2014.

Energy Release Component (ERC)

(ERC is an index related to how hot a fire could burn. It is directly related to the 24-hour, potential worst case, total available energy (BTUs) at the head of a fire. The ERC can serve as a good characterization of fire season as it tracks seasonal fire danger trends well. ERC has low variability, and is the best fire danger component for indicating the effects of intermediate to long-term drying on fire behavior.)

The recent hot weather has decreased dead fuel moistures and increased ERC values to near record levels which increase relative fire danger.

Economic:

Drought-related job losses are continuing to increase across the state. The San Luis Obispo County Workforce Investment Board (WIB) is gathering information on local drought-related job impacts. This is part of a statewide survey by the California Labor and Workforce Development Agency (LWDA) as part of an ongoing online survey to inform the Governor's Drought Relief Task Force of the drought's ripple effects. The WIB's Drought Business Impact survey is available at http://sloworkforce.com/drought-survey/. Local Workforce Investment Boards, workforce partners, and other local workforce entities are encouraged to complete the survey regularly to keep the Governor's Drought Relief Task Force up to date on the local area. The WIB is conducting outreach to chambers of commerce and other business services agencies for assistance in outreach to businesses and employers regarding the drought survey. Though the WIB is hearing that there are impacts, the county does not have any "reportable" impacts due to the State's requirements for reporting (i.e. specific business name, address, etc.).

STATE & FEDERAL KEY ACTION ITEMS FROM LAST MONTH

Governor Brown Signs Historic Groundwater Legislation

On September 16, Governor Edmund G. Brown signed historic legislation to strengthen local management and monitoring of groundwater basins. The three bills signed - AB 1739 by Assemblymember Roger Dickinson (D-Sacramento) and Senate Bills 1168 and 1319 by Senator Fran Pavley (D-Agoura Hills) establish a definition of sustainable groundwater management and require local agencies to adopt management plans for the state's most important groundwater basins. The legislation prioritizes groundwater basins that are currently overdrafted and sets a timeline for implementation:

- By 2017, local groundwater management agencies must be identified;
- By 2020, overdrafted groundwater basins must have sustainability plans;
- By 2022, other high and medium priority basins not currently in overdraft must have sustainability plans; and
- By 2040, all high and medium priority groundwater basins must achieve sustainability.

On the same day the Governor signed AB 2453 by Assemblymember Katcho Achadjian (R-San Luis Obispo) - Paso Robles Basin Water District, providing for the formation of the Paso Robles Basin Water District, and sets forth the composition of, and method of election by landowners and registered voters for, the board of directors for the Paso Robles Basin Water District, the boundaries of which would be established and may be modified by the San Luis Obispo County Local Agency Formation Commission.

Agencies Expediting Well Drilling Licensing During California Drought

With the drought now posing health and safety concerns for families who rely on well water, and businesses that need ground water resources, the Contractors State License Board (CSLB) is expediting applications for C-57 Well Drilling contractors.

Domestic Water Issues-Intake Form

The number of dry groundwater wells, small streams, springs, and creeks are increasing as the drought continues. An effective response to this growing public health threat requires two key elements: (1) data collection to better understand the extent of the problem and (2) clear communication to all responding agencies and the public about available resources. As a result, the Governor's Drought Task Force created an interagency working group focused on households relying on a domestic system serving 1 to 14 homes, commonly referred to as the Less Than 15 Connections Work Group. This group created an online intake form for local, state, or tribal and federal agencies to document domestic water issues. The information is intended to inform and coordinate state response and mitigate drought impacts. Data collected is considered confidential and access is restricted. County OES and County Environmental Health participated in a statewide conference call on this new information intake process on September 18. While this is recognized as a good concept, it was noted by a number of counties on the call that people continue to hesitate to give out information related to their wells and other water sources having gone dry.

Individuals with domestic water issues are encouraged to contact County Environmental Health at (805) 781-554).

Executive Order to Assist with Water Shortages

On September 18, the Governor, through an executive order, activated the California Disaster Assistance Act (CDAA) to reimburse local government agencies up to 75% of their costs related to assisting residents with obtaining water. For example, the recent delivery of bottled water to hundreds of homes in Tulare County by various local agencies can be submitted to Cal OES for up to 75% reimbursement. The way this information was released in the news media can be misunderstood as a direct assistance program to the public. However, as noted above CDAA is a program that reimburses local agencies for disaster related costs. While Cal OES is still developing a fact sheet related to the Governor's order, as of September 23, 2014 it does not appear any local government costs incurred by the County related to the drought are eligible for CDAA reimbursement.

The executive order also extends the state's prohibition on price gouging during emergencies to the current stage of the drought, recognizing the on-going nature of the drought emergency.

COUNTY DROUGHT TASK FORCE KEY ACTION ITEMS FROM LAST MONTH

County Office of Emergency Services:

San Luis Obispo County OES continues to coordinate weekly with Cal OES to provide updates on the drought situation, respond to specific information requests to Cal OES, and coordinate local emergency needs. In addition, County OES continues to gaterh local situation status information and drought costs throughout the county in order to send the information to Cal OES.

Emergency Actions:

No new emergency actions have been taken specific to the drought in this reporting period.

County Facilities Usage & Conservation Actions:

General Services has taken the following actions:

- <u>Fixture Replacement:</u> To date, a total of 35 buildings have been retrofitted with low-flow fixtures, saving an estimated 3,000 gallons per week.
- Water Audit: Water audit site visit was conducted in July with focus on water efficiency opportunities County facilities, parks, and golf. The site visit estimated a rough savings of 15 acre-feet by replacing fixtures and performing retrofits at County Operations Center facilities. Findings from water audit will be developed into future plans for projects.
- <u>Energy and Water Manager Professional Services Contract:</u> Proposals for Energy and Water Manager professional services contract were received, negotiations are in progress, and it is now estimated that a contract will be awarded in October.

 <u>Dairy Creek Golf Course:</u> Diary Creek Golf Course (DCGC) receives treated effluent water from the California Men's Colony (CMC) for irrigation. Collaboration between County staff and California Men's Colony resulted in the discovery of a broken water line which delivers recycled water to Dairy Creek Golf Course. The line was repaired within days of the recovery.

Drought Contingency Planning:

The Public Health Department, the Public Works Department, and CAL FIRE/County Fire continue to develop plans to ensure there is adequate supply of water for firefighting and domestic water use in the event that a community does not have enough water. A GIS mapping layer has been created showing. Water availability information from small public water systems has been categorized into three categories; Watch, Vulnerable, and Critical. The information has been placed into a GIS mapping layer for contingency planning.

County Public Outreach Actions:

The Public Works Department continues to work with agencies affected by the drought and provide educational presentations to interested parties. Conservation mailers have been sent to retail customers along with conservation signs in County Service Areas.

Information regarding current and upcoming drought relief programs for rural homeowners has been placed on the County Drought Conditions and Water Conservation webpage. Rural Development, an agency of the United States Department of Agriculture (USDA), delivers a number of programs to help improve the quality of life in rural communities throughout the nation. These programs may also help rural communities, businesses and individuals impacted by California's ongoing drought conditions. For additional resources and information on applying for any of these programs, please visit http://www.rurdev.usda.gov/ca or the County Drought Conditions and Water Conservation webpage at http://www.slocounty.ca.gov/admin/Drought Update.htm.

In an effort to raise awareness about water supply issues and communicate the call for a 20% voluntary reduction in water usage, the County continues to examine multiple channels of communication for water conservation outreach efforts.

DROUGHT RELATED WEBSITES FOR MORE INFORMATION

County of San Luis Obispo Drought Conditions and Water Conservation, (http://www.slocounty.ca.gov/admin/Drought Update.htm)

State's Water Conservation Campaign; Save our Water (www.saveourh2o.org)
California's Drought Information Clearinghouse; Dought.CA.Gov (ca.gov/drought/)

California Department of Food and Agriculture; Drought information (www.cdfa.ca.gov/drought/)
California Department of Water Resources; Current Water Conditions

(www.water.ca.gov/waterconditions/drought/)

California State Water Resources Control Board; Water Rights, Drought Info and Actions (www.swrcb.ca.gov/waterrights/water issues/programs/drought/index.shtml)

California Department of Public Health; Drinking Water CDPH Drinking Water Program (www.cdph.ca.gov/programs/pages/dwp.aspx)

USDA Disaster and Drought Assistance Information; USDA Programs (usda.gov/wps/portal/usda/usdahome?navid=DISASTER ASSISTANCE)

UC Cooperative Extension Drought Information Resources; Drought Information Resources; cesanluisobispo.ucanr.edu/Drought_Information/